COMBINED DECLARATION AND POWER OF ATTORNEY FOR UTILITY PATENT APPLICATION

Attorney's Docket No.

FOR UTILITY PATENT APPLICA	ATION	030673-138
As a below-named inventor, I hereby declare that:		
My residence, post office address and citizenship are as sta	ted below next to my name	, ;
I BELIEVE I AM THE ORIGINAL, FIRST AND SOLO ORIGINAL, FIRST AND JOINT INVENTOR (if more the WHICH IS CLAIMED AND FOR WHICH A PATENT IS	an one name is listed below	A OF THE SUBJECT MATTER
A METHOD OF MANUFACTURING A RIGID INTER	NAL GEAR OF A WAVE	GEAR DEVICE
	_	
the specification of which		
(check one)	☐ is attached hereto;	
	was filed on April	9, 2002 as
	Application No.	
	and was amended on	;
		(if applicable)
I HAVE REVIEWED AND UNDERSTAND THE CONT INCLUDING THE CLAIMS, AS AMENDED BY ANY A	MENDMENT REFERRED	TO ABOVE;
I ACKNOWLEDGE THE DUTY TO DISCLOSE TO THE MATERIAL TO PATENTABILITY AS DEFINED IN TIT (as amended effective March 16, 1992);	OFFICE ALL INFORMA LE 37, CODE OF FEDER	TION KNOWN TO ME TO BE AL REGULATIONS, Sec. 1.56
I do not know and do not believe the said invention was ever or our invention thereof, or patented or described in any prothereof or more than one year prior to said application; that States of America more than one year prior to said application subject of an inventor's certificate issued before the date of of America on any application filed by me or my legal representations.	inted publication in any cou said invention was not in p ion; that said invention has a said application in any coun	ntry before my or our invention ublic use or on sale in the United not been patented or made the utry foreign to the United States

Page 1 of 2

I hereby claim foreign priority benefits under Title 35, United States Code Sec. 119 and/or Sec. 365 of any foreign application(s) for patent or inventor's certificate as indicated below and have also identified below any foreign

which priority is claimed:

application for patent or inventor's certificate on this invention having a filing date before that of the application(s) on

COMBINED DECLARATION AND POWER OF ATTORNEY

Attorney's Docket No.

030673-138

COUNTRY/INTERNATIONAL	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
Japan	JP2001-109759	09 April 2001	YESX NO_
			YES_ NO_

I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:

William L. Mathis Robert S. Swecker Platon N. Mandros Benton S. Duffett, Jr. Norman H. Stepno Ronald L. Grudziecki Frederick G. Michaud, Jr. Alan E. Kopecki Regis E. Slutter Samuel C. Miller, III Robert G. Mukai George A. Hovanec, Jr. James A. LaBarre E. Joseph Gess R. Danny Huntington	17,337 19,885 22,124 22,030 22,716 24,970 26,003 25,813 26,999 27,360 28,531 28,223 28,632 28,510 27,903	Eric H. Weisblatt James W. Peterson Teresa Stanek Rea Robert E. Krebs William C. Rowland T. Gene Dillahunty Patrick C. Keane B. Jefferson Boggs, Jr. William H. Benz Peter K. Skiff Richard J. McGrath Matthew L. Schneider Michael G. Savage Gerald F. Swiss Charles F. Wieland III	30,505 26,057 30,427 25,885 30,888 25,423 32,858 32,344 25,952 31,917 29,195 32,814 32,596 30,113 33,096	Bruce T. Wieder Todd R. Walters Ronni S. Jillions Harold R. Brown III Allen R. Baum Brian P. O'Shaughnessy Kenneth B. Leffler Fred W. Hathaway Wendi L. Weinstein Mary Ann Dillahunty Donna M. Meuth Mark R. Kresloff	33,815 34,040 31,979 36,341 36,086 32,747 36,075 32,236 34,456 34,576 36,607 42,766
--	--	--	--	---	--

and:

Address all correspondence to:



21839

William C. Rowland

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

P.O. Box 1404

Alexandria, Virginia 22313-1404

Address all telephone calls to:	William C. Rowland	at (703) 836-6620
	7. 122 CT 130 WILLIA	at (703) 630-0020

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

HILL NAME OF COLE OF CITION TARTESTOOD			
FULL NAME OF SOLE OR FIRST INVENTOR	SIGNATURE		DATE
Masaru KOBAYASHI	Masara. K.	bareshi	May 15, 2002
RESIDENCE	17 X = 10 X = 10 2	CITIZENSHIP	713, 2002
N		CITIZENSHIP	
Nagano-ken, JAPAN	1	Japanese	
POST OFFICE ADDRESS			
c/o Harmonic Drive Systems Inc., Hotaka-kojo, 1856-1, Oaza Mak	i, Hotaka-machi, Minamiaz	zumi-gun, Nagano-l	ken, 399-8305 JAPAN
FULL NAME OF SECOND JOINT INVENTOR, IF ANY	SIGNATURE		DATE
Yoshihiro TANIOKA	Joshihito . Tar	rioka	May 16.2002
RESIDENCE		CITIZENSHIP	
Nagano-ken, JAPAN		Japanese	
POST OFFICE ADDRESS		Japanese	Start 2
			CSI
c/o Harmonic Drive Systems Inc., Hotaka-kojo, 1856-1, Oaza Maki	i, Hotaka-machi, Minamiaz	umi-gun, Nagano-k	cen, 39948305 JAPAN



AUGUST 08, 2002

PTAS

BURNS, DOANE, SWECKER ET AL. WILLIAM C. ROWLAND P.O. BOX 1404 ALEXANDRIA, VA 22313-1404

Chief Information Officer Washington, DC 20231 www.uspto.gov



102118258A*

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 06/05/2002

REEL/FRAME: 012962/0426

NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

KOBAYASHI, MASARU

DOC DATE: 05/15/2002

ASSIGNOR:

TANIOKA, YOSHIHIRO

DOC DATE: 05/16/2002

ASSIGNEE:

HARMONIC DRIVE SYSTEMS INC. 25-3, MINAMIOI 6-CHOME, SHINAGAWA-

030673-138

TOKYO 140-0013, JAPAN

SERIAL NUMBER: 10117993 PATENT NUMBER:

FILING DATE: 04/09/2002

ISSUE DATE:

Votorawa ? G. BUHNS, DOANE, SWEEKER & MATHIS, L.L.P.

SAUNDRA BALLENGER, EXAMENER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORD

AUG 1 2 2002

RECEIVED

AUG LO UZ

FORM PTO-1595 (Rev. 6/93)

JUN 0 5 2002

06-11-2002



102118258

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

ET

Attorney's Docket No. 030673-138

To the Honorable Carrier of Potents and Tonday	The state of the s
	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies): 6.5.02	2. Name and address of receiving party(ies):
Masaru Kobayashi and Yoshihiro Tanioka	Name: <u>Harmonic Drive Systems Inc.</u>
Additional name(s) of conveying party(ies) attached? [] Yes [X] No	Address: 25-3, Minamioi 6-chome, Shinagawa-ku,
3. Nature of conveyance:	Tokyo, 140-0013 JAPAN
[X] Assignment [] Merger [] Change of Name	
Other:	
Execution Date: 05/15/02 and 05/16/02	Additional name(s) & address(es) attached? [] Yes [X] No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, th	e execution date of the application is:
A. Patent Application No.(s)	B. Patent No.(s)
10/117,993	
Additional numbers attach	ned? [] Yes [X] No
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One (1)
Name: William C. Rowland	7. Total fee (37 CFR § 3.41): \$_40.00
Address: Burns, Doane, Swecker & Mathis, L.L.P.	[X] Enclosed
P.O. Box 1404	
Alexandria, Virginia 22313-1404	[X] Authorized to be charged to deposit account, if necessary
THOMAININA, VIIGINIA 22515-1404	8. Deposit account number:
	02-4800
DO NOT USE	THIS SPACE
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true as William C. Rowland, R.N. 30,888 Name of Person Signing	ad correct and any attached copy is a true copy of the original document. 6-5-02 Signature
т	otal number of pages including cover sheet, attachments, and document: 3
	3 and document: 3
Mail documents to be recorded with r	

recorded with required cover sheet information to:

Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231

06/10/2002 TDIAZ1

00000106 10117993

01 FC:581

40.00 OP

i.e

0306	73-138	
Attorney's	Docket	No.

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by MASARU KOBAYASHI, and YOSHIHIRO TANIOKA, residing at NAGANO-KEN, JAPAN and NAGANO-KEN, JAPAN (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>A METHOD OF MANUFACTURING A RIGID INTERNAL GEAR OF A WAVE GEAR DEVICE</u> set forth in an application for Letters Patent of the United States,

(1) which is a provisional applicati	application	provisional application	а	is	which	(1)	(
--------------------------------------	-------------	-------------------------	---	----	-------	-----	---

- (a) Dearing Application No. __, and filed on _;
- (b) I to be filed herewith; or

(2) M which is a non-provisional application

- (a) bearing Application No. 6/117, 993, and filed on APRIL 9, 2002;
- (b) having an oath or declaration executed on even date herewith prior to filing of application;
- (c) \square having an oath or declaration executed on a different date than this Assignment; and

WHEREAS, <u>HARMONIC DRIVE SYSTEMS INC.</u>, a corporation duly organized under and pursuant to the laws of <u>JAPAN</u> and having its principal place of business at <u>25-3</u>, <u>MINAMIOI 6-CHOME</u>, <u>SHINAGAWA-KU, TOKYO, 140-0013 JAPAN</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

Application No.	
Attorney's Docket	No. <u>030673-138</u>

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of Burns, Doane, Swecker & Mathis, L.L.P. of Alexandria, Virginia to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date_	May 15, 2002	Signature of Assignor	Mwsara Kobayashi
			Masaru KOBAYASHI
Date_	May 16. 2007	Signature of Assignor	Joshihiro Tanioka
			Yoshihiro TANIOKA